This Olympic Skier Wants to Save the World's Snow

The New York Times

February 7, 2018 Wednesday 15:03 EST

Copyright 2018 The New York Times Company All Rights Reserved

Section: CLIMATE Length: 1142 words

Byline: Henry Fountain, Kendra Pierre-Louis and Hiroko Tabuchi

Highlight: Also this week: Scientists win a \$1 million prize for mapping peat. (Yes, peat.)

Body

Welcome to the Climate Fwd: newsletter. The New York Times climate team emails readers once a week with stories and insights about climate change. Sign up here to get it in your inbox.

This week: the threat to skiing, a \$1 million prize for peat and a hidden flooding risk.

The thrill of victory

Jessie Diggins is a cross-country skier on the American women's team and a favorite to win a medal at the Winter Games in Pyeongchang, South Korea. If she succeeds, it will be only the second time the United States has won a medal in the sport and the first for an American woman.

Diggins is also an advocate for climate action. I interviewed her to understand more about why she believes winter is worth protecting. (The following has been condensed and edited.)

How has climate change affected you?

Over the last 10 years, it has been hard to ski on real snow. Over the last three years, most venues have been exclusively on man-made snow. And in places like Davos, Switzerland, where they normally have three feet of snow, they've been snow farming and saving it for the next year because they don't even count on getting snow anymore. I've spoken to people in Switzerland who are losing their jobs because winter's going away.

How is skiing on man-made snow different?

It's a little faster. So the same World Cup courses that we race get more and more dangerous with man-made snow because it gets icy. One of my teammates broke his leg on a corner on a course where it never should have been as fast as it was. Real snow, it feels softer. It's not as hard when you fall.

What about people who say that fighting climate change is going to hurt the economy?

You can look at different solutions for the economy, but you only get one earth to live on, and you have to breathe the air that is on this earth. We have to do it in a way that doesn't hurt families economically, which is why I'm supporting the carbon fee and dividend solution, because it puts a fee on carbon and returns the revenue to households.

What do you say to those who say, 'You're just an athlete, stay in your lane'?

I'm also someone who lives on this planet. I think you need to be able to stand up for things you believe in, and saving winter is something I believe in. It just breaks my heart because this is such a cool sport, and winter is so

This Olympic Skier Wants to Save the World's Snow

amazing and beautiful and I feel like we're actually really at risk of losing it. And I don't want my kids to grow up in a world where they've never experienced snow because we weren't responsible enough.

... and the agony of the peat

Indonesia has a peat problem, and it just awarded a \$1 million prize to help solve it.

Peatlands — thick layers of waterlogged, partially decomposed vegetation — hold enormous amounts of carbon. Worldwide, by some estimates, they store twice as much as the world's forests. Indonesia, with 50 million acres of swampy peatlands, has the most peat in Asia and probably the most among tropical countries.

But over the past several decades, uncontrolled agricultural development has led to the draining and burning of Indonesian peatlands and the destruction of the forests that cover much of them.

The carbon in peat was removed from the atmosphere when the vegetation was growing, hundreds or even thousands of years ago. Burning it is like burning coal or oil — it adds old carbon back into the atmosphere, contributing to global warming.

About 40 percent of Indonesia's carbon emissions come from burning peat. The fires also produce smoke and haze that pollutes the region's air. In 2015, the worst fires in decades may have led to 100,000 premature deaths across Southeast Asia.

Under international pressure to better manage its peatlands, the Indonesian government has taken some steps, including a very basic one: trying to accurately determine where the peat is.

Two years ago the government, with assistance from the David and Lucile Packard Foundation and the World Resources Institute, an environmental research group, opened a competition to develop an inexpensive and efficient method of mapping Indonesia's peat. Twenty-two teams entered.

Last week, the winner was announced, as selected by a scientific advisory board: a German remote-sensing firm, RSS, working with researchers in Europe and Indonesia. Calling itself the International Peat Mapping Team, the group takes home the \$1 million prize.

The team's approach uses satellite imagery and radar- and laser-based data about elevations and terrain, coupled with coring of peatlands to determine thickness (some peatlands are as thick as 50 feet).

Florian Siegert, managing director of RSS and a professor at the University of Munich who has been studying peat in Indonesia and elsewhere for several decades, said he thought his team won because coring is precise, cost-efficient and easy to implement. "They don't need highly sophisticated technology," he said.

Dr. Siegert said the next step was for the Indonesian government to actually undertake a mapping program. By knowing more precisely where the peatlands are, the government can be more careful about where it grants concessions for agricultural development, and perhaps even revoke some concessions already granted.

Indonesia in the past has been accused of dragging its feet on its peat problem. But Dr. Siegert said he thought the government would follow through with a mapping program. "Now I think the international pressure is big enough," he said. "The fires in 2015 were so extensive."

Our mapping project: flood risks at chemical sites

When flooding from Hurricane Harvey knocked out the power supply to a chemical plant outside Houston last year, causing volatile chemicals to ignite a dramatic blaze, it made us wonder about the dangers that more extreme flooding might pose to sites like these.

So I teamed up with our graphics editor Nadja Popovich and our colleagues on the data team to find out which of the nation's chemical facilities lie in floodplains. The result is our recent visual story, which identified plants that

This Olympic Skier Wants to Save the World's Snow

handle toxic chemicals within floodplains in every American state — 2,500 chemical facilities overall, with 1,400 of them in areas at highest risk of flooding. And many of these sites are already reporting leaks related to flooding.

Take a look at the story, and be sure to tell us what you think.

We'd love your feedback on this newsletter. Please email thoughts and suggestions to climateteam@nytimes.com

If you like what we're doing, please spread the word and send this to your friends. You can sign up here to get our newsletter delivered to your inbox each week.

And be sure to check out our full assortment of free newsletters from The Times.

PHOTO: The American cross-country skier Jessie Diggins competing in 2016. "Saving winter is something I believe in," she said. (PHOTOGRAPH BY Alexander Hassenstein/Bongarts, via Getty Images FOR THE NEW YORK TIMES)

Classification

Language: ENGLISH

Document-Type: News

Publication-Type: Web Blog

Subject: SKIING (99%); ATHLETES (90%); CLIMATE CHANGE (90%); CLIMATOLOGY (90%); OLYMPICS (90%); SPORTS & RECREATION EVENTS (90%); WINTER OLYMPICS (90%); CLIMATE ACTION (79%); WEATHER (79%); 2018 PYEONGCHANG WINTER OLYMPICS (78%); SPORTS & RECREATION (78%); SPORTS AWARDS (78%); WINTER SPORTS (78%); LAYOFFS (73%); BONE FRACTURES (71%); FAMILY (70%); DISMISSALS (51%); Peat (%); Global Warming (%); Diggins, Jessica (1991-) (%); Cross-Country Skiing (%); Indonesia (%); Olympic Games (%); South Korea (%); Floods (%); Chemicals (%); Snow and Snowstorms (%); Carbon Dioxide (%); Air Pollution (%)

Person: Diggins, Jessica (1991-)

Geographic: EARTH (79%); GRAUBUNDEN, SWITZERLAND (79%); SWITZERLAND (92%); UNITED STATES

(91%); INDONESIA (90%)

Load-Date: October 26, 2018

End of Document